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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/075,450	02/15/2002	Pascal Gauthier	111978	8745

25944 7590 10/02/2002

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EXAMINER

LAM, THANH

ART UNIT PAPER NUMBER

2834

DATE MAILED: 10/02/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/075,450

Applicant(s)

Pascal

Examiner

Thanh Lam

Art Unit

2834



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 4 6) ☐ Other:

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DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1,3-16,18-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Toida et al. (PN. 5,691,584).

Regarding claims 1, (see figs. 1-7)Toida discloses a driving wheel element comprising: a wheel (2) and an electric motor for rotating the wheel, wherein the electric motor is a synchronous motor having a permanent magnet rotor (8) and a stator (7)comprising teeth (7a) and respective individual windings on said teeth.

Regarding claims 3, Toida discloses the wheel is coupled to the motor via stepdown gearing (5).

Regarding claims 4, Toida discloses the gearing comprises a single stepdown stage.

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Regarding claims 5, Toida discloses the gearing comprises an epicyclic gear train.

Regarding claims 6, Toida discloses a main casing (6) comprising a large-diameter tubular wall and a small-diameter tubular wall interconnected by a transverse wall, the stator being received in the large diameter wall, which wall is secured to a first bearing forming piece, the small-diameter tubular wall being secured to a second bearing-forming piece.

Regarding claims 7, Toida discloses the second bearing-forming piece also constitutes a planet carrier and has at least one pin rotatably carrying at least one planet wheel.

Regarding claims 8, Toida discloses said planet-carrier carries three planet wheels, each planet wheel meshing with a gear cut in or fitted to the rotor shaft, and also with a ring gear of a support.

Regarding claims 1, Toida discloses a rim supporting a tire is fixed to the support.

Regarding claims 10, Toida discloses the support rotates via a bearing on the small-diameter tubular wall of the main casing.

Regarding claims 11, Toida discloses a cap fitted in leak tight manner to the support.

Regarding claims 12, Toida discloses an electromagnetic brake that operates in the event of a power failure, the brake being fitted to said first bearing-forming teeth, and comprising a disk fixed to a fluted end of the motor shaft.

Regarding claims 13, Toida discloses the main casing is mounted to swivel about a vertical axis.

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Regarding claims 14, Toida discloses the motor drives a wheel and wherein the main casing is fixed in non-swivel manner to the chassis of the cart.

Regarding claims 15, Toida discloses the rotor is coaxial with the tire of the wheel.

Regarding claims 16, Toida discloses a hoisting winch comprising: a winch and an electric motor for rotating the winch, wherein the electric motor is a synchronous motor having a permanentmagnet rotor and a stator comprising teeth and respective individual windings on said teeth.

Regarding claims 18, Toida discloses the winch is coupled to the motor via stepdown gearing.

Regarding claims 19, Toida discloses the gearing comprises a ingle stepdown stage.

Regarding claims 20, Toida discloses the gearing comprises an epicyclic gear train.

Regarding claims 21, Toida discloses a main casing comprising a large-diameter tubular wall and a small diameter tubular wall interconnected by a transverse wall, the stator being received in the large diameter wall, which wall is secured to a first bearing forming piece, the small-diameter tubular wall being secured to a second bearing-forming piece.

Regarding claims 22, Toida discloses the second bearing-forming piece also constitutes a planet carrier and has at least one pin rotatably carrying at least one planet winch.

Regarding claims 23, Toida discloses said planet-carrier carries three planet wheels, each planet wheel meshing with a gear cut in or fitted to the rotor shaft, and also with a ring gear of a support.

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Regarding claims 24, Toida discloses the support rotates via a bearing on the small-diameter tubular wall of the main casing.

Regarding claims 25, Toida discloses a cap fitted in leak tight manner to the support.

Regarding claims 26, Toida discloses an electromagnetic brake that operates in the event of a power failure, the brake being fitted to said first bearing-forming teeth, and comprising a disk fixed to a fluted end of the motor shaft.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 2 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Toida et al. in view of Abukawa et al. (EP 0 872 943 A1).

Toida et al. disclose every aspect of the claimed invention except for the rotor is a flux-concentrating rotor and has magnets disposed between pole pieces.

Abukawa et al. disclose the rotor is a flux-concentrating rotor and has magnets (21) disposed between pole pieces.

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the rotor of Toida et al. to accommodate the rotor as taught by Abukawa to improve the flux concentration between the rotor and the stator of the motor.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh Lam whose telephone number is (703) 308-7626. The fax phone number for this Group is (703) 305-3432.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0656.

A handwritten signature in black ink, appearing to read 'Thanh Lam', with a stylized, flowing script.

Thanh Lam

Patent Examiner